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# America's Ideal Heat





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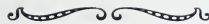
# Foreword.



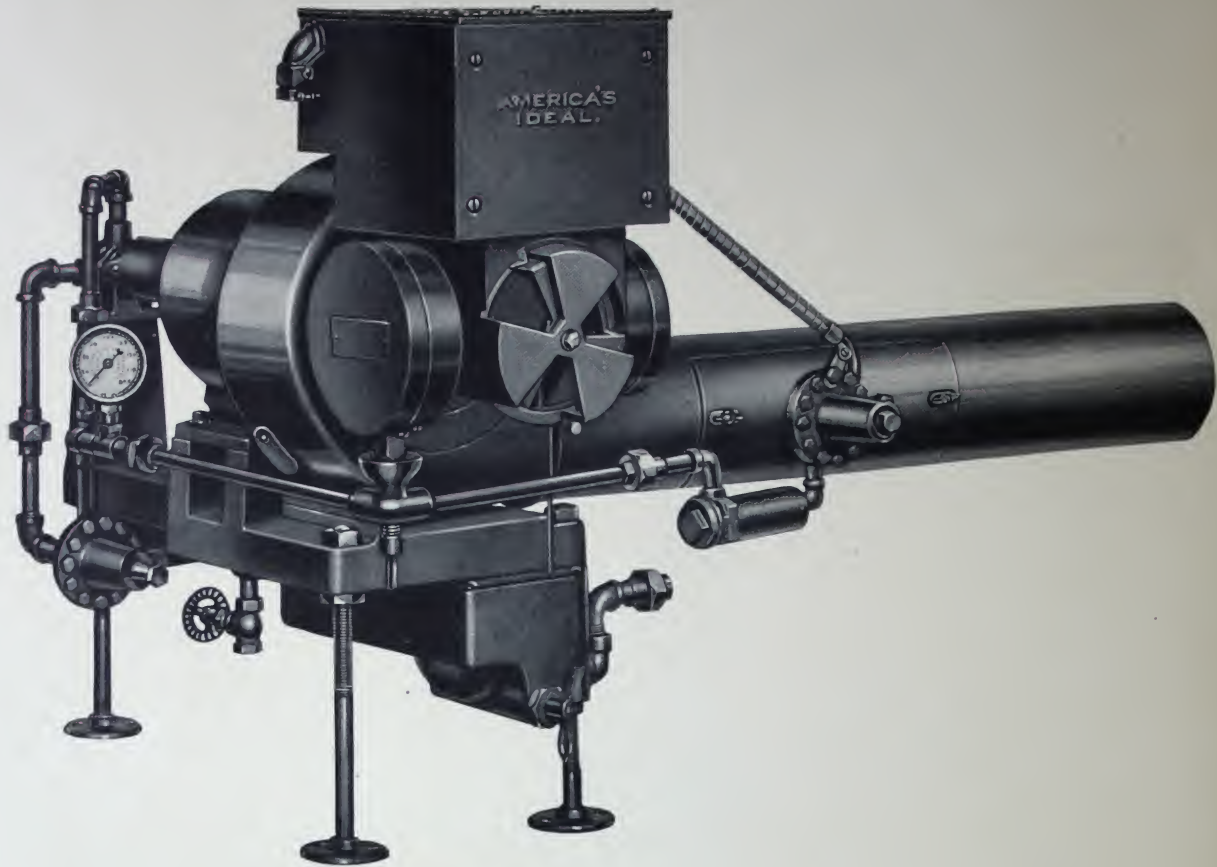
N oil burner that is guaranteed, *perfect in operation*,—offers an investment in health, comfort and economy that can not be paralleled.

It replaces hit and miss heating,—it replaces the drudgery of coal and the drudgery of constant cleaning and labor,—with a regular, evenly controlled heat that requires no care nor attention.

A careful study of this booklet will pay you many times over by giving you an understanding of the necessary features in an oil burner that is guaranteed—*simple and perfect in operation*.



# A M E R I C A ' S   I D E A L   H E A T



## *America's Ideal Oil Burner Guaranteed*

Completely Automatic

Positive Electric Arc Ignition. No Gas Pilot.

Rooms Thermostatically Controlled.

Temperatures Held Within Two Degrees.

No Labor. No Noise. No Dirt. No Odor.



There is Health for the children in the constant even temperature of your home—that is positively automatically controlled.

Read these points above carefully. They tell volumes of the comfort that America's Oil Burner gives the home. Here is absolute protection from sudden temperature changes. The home is thermostatically guarded from cold and from over heating. A constant, regular heat is supplied without noise or dirt or labor.





# Introduction



THE IDEAL HEAT PROBLEM OF TO-DAY must eliminate every objectionable feature to be found beginning with the storage of fuel preparatory to the fall and winter season. The size of tanks necessary to hold a supply must be ample so that oil can be put in during the summer months to avoid the bad weather and rush in winter, and oil does not deteriorate while in storage.

Oil storage tanks can be placed in the basement or at any convenient distance from the building.

OIL FUEL is burnt without smoke or dirt, thus avoiding all dust throughout your building, reducing your cleaning bills fifty (50) per cent. Oil is cheaper than coal, contains more heat units, the average oil fuel contains 18,500 B.T.U. as against coal 13,500 B.T.U. per pound;—it is therefore quite natural that *architects* and *owners* are giving serious consideration to burning oil as fuel, twenty (20) per cent higher evaporative efficiency can be obtained. Many instances have occurred where we have been able to do the work when coal could not.

## Simplicity

AMERICA'S IDEAL OIL BURNER *is the simplest ever built*, using only the very best of materials in its construction, dependable for many years of service, reliable, rigid and strong, endorsed by every user.

## Simple Construction

AMERICA'S IDEAL OIL BURNER is easily understood; each regulator is so simple, so positive, everyone understands it right from the beginning. One explanation and you understand it thoroughly. The oil pumped under pressure to the nozzle situated two inches back from the end of *venturi tube* (page seven) at the same time air is being conveyed by a silent fan past the nozzle and at this point the two elements (a fine mist of oil and air) are mixed together and ignited by an electric ARC from a 7,500 volt transformer, the ignited fuel passes on to the combustion chamber where the mixture is completely burnt in suspension thus extracting all the *heat units* contained in the oil and delivering same to your heater or boiler.



## Room Temperatures

Every INSTALLATION of AMERICA'S IDEAL BURNER uses the very best THERMOSTATS, simple, reliable and dependable, *temperature* of the *room* controls the THERMOSTAT which is set or put at a convenient place in your home or apartment, and electrically connected to the burner in basement. Now set the indicator to say 78 degrees and the *burner* will supply heat to hold that temperature within two degrees and maintained continuously until you change the indicator of THERMOSTAT to say 55 degrees before retiring which temperature will be held during the night. With THERMOSTATIC CONTROL the *room* is kept whatever temperature you may desire and at any time, thus avoiding all waste of oil as it is burnt only as you need it for *heat* in the *rooms where you need it*.

## Steam Pressure Safety Control

All steam and vapor systems are controlled by PRESSURESTATS attached direct to the boiler or heater *for safety* which is generally set for a range from 2 to 5 pounds steam pressure, at two pounds the PRESSURESTAT will allow the burner to start and at five pounds compels the burner to stop. This explains the absolute safety when using AMERICA'S IDEAL OIL BURNER. It avoids all waste of fuel. *Vapor systems* are controlled the same way with *controls* set for the range required. This *ideal heat* is impossible with coal fired systems.

## Hot Water Safety Control

All hot water systems are controlled by AQUASTATS which is attached direct to your hot water heater *for safety* and generally set for a range of 175 to 200 degrees temperature, at 175 degrees the AQUASTAT will permit the burner to automatically start and raise the temperature to 200 degrees when it is compelled to stop automatically. These AQUASTAT controls are very simple, never get out of order, always positive, avoiding all waste of fuel. You can easily see from the explanation above how superior and economical this system is. This also explains why IDEAL OIL BURNERS has the great advantage over coal fired systems.

## Hot Air Controls

All hot air systems are controlled THERMOSTATICALLY, heat alone starts and stops the burner, avoiding all waste.







The Venturi Tube

## Venturi



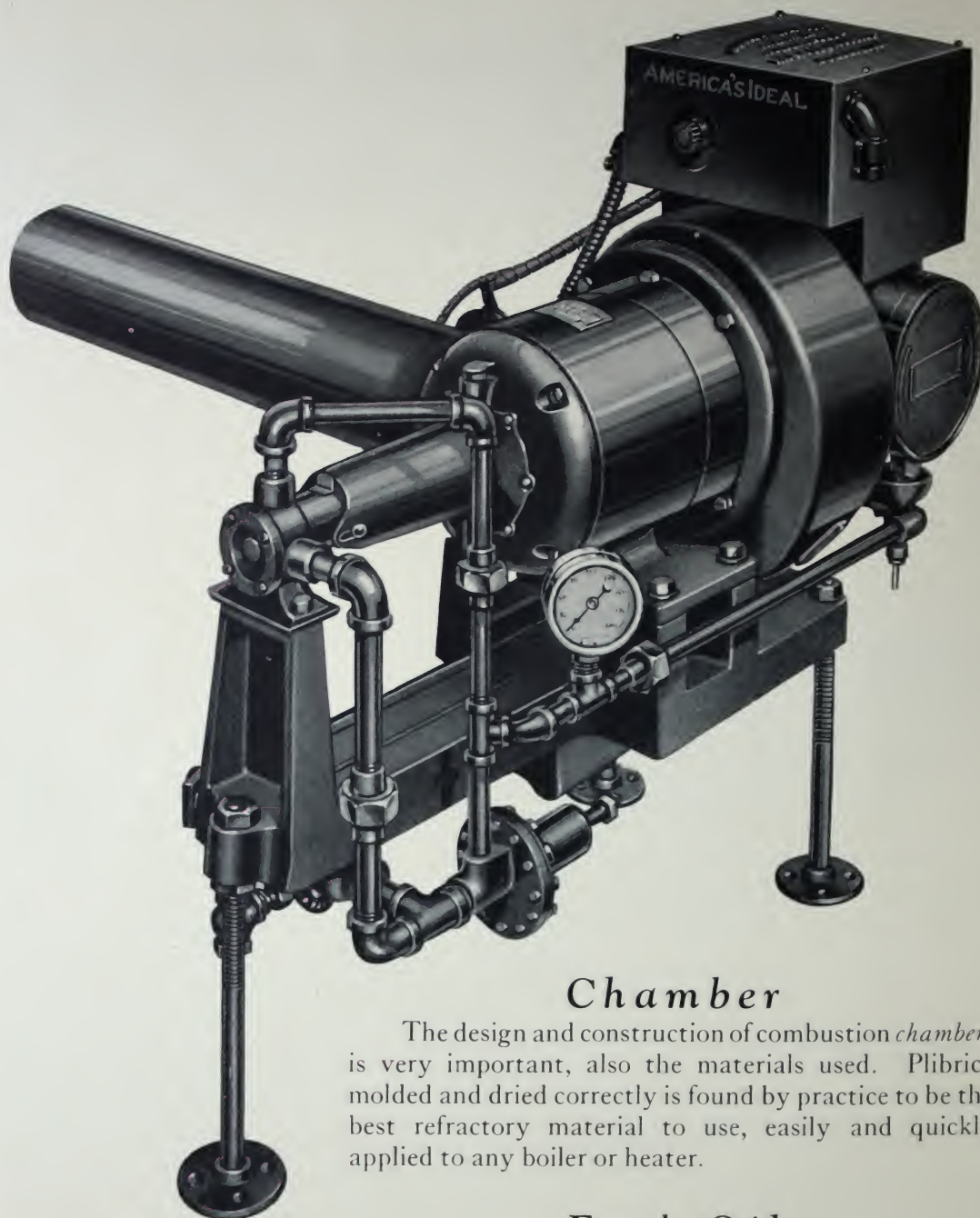
SILENT fan is used to convey air thru the VENTURI TUBE (shown above.) The air passing to the combustion chamber must be a certain quantity or volume as required for each individual installation. The quantity of air required must be measured for the amount of oil to be burnt—therefore the volume of air admitted to the fan must be very carefully measured to produce pure combustion and extract all the *heat units* contained in the oil; AMERICA'S IDEAL OIL BURNERS measure the exact amount required. You will readily see that such a condition is impossible with coal fired systems.

## Combustion

AMERICA'S IDEAL OIL BURNERS when starting always have the electric ARC on, air is conveyed thru the VENTURI TUBE, almost instantly the oil is forced by pressure thru the nozzle and expands into a fine fog saturating the air. This mixture is ignited by the electric ARC and passes on to the combustion chamber and at the same time gradually and automatically the volume of air is increased until the full amount is admitted to make pure and complete combustion. Within a few seconds the electric arc is automatically stopped and will not be required until the above process is repeated. With this system of ignition no gas is used or required.



# A M E R I C A ' S   I D E A L   H E A T



## Chamber

The design and construction of combustion *chambers* is very important, also the materials used. Plibrico molded and dried correctly is found by practice to be the best refractory material to use, easily and quickly applied to any boiler or heater.

## Fuel Oil

We recommend 24 to 34 gravity, the 34 for small units and 24 for the largest Burners.

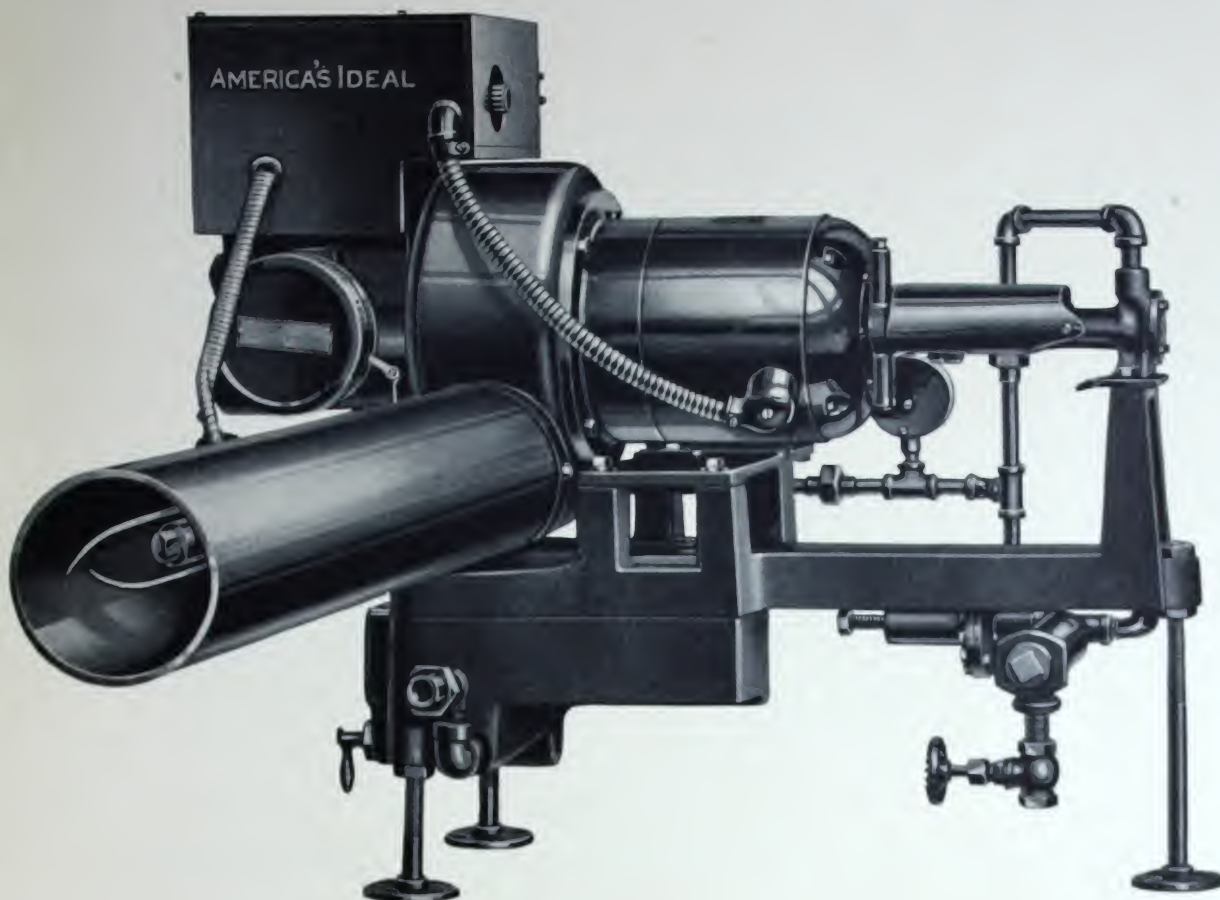


Not even the scraping of a shovel in the coal bin to disturb the quiet of your home — America's Ideal Heat is *noiseless*.





# A M E R I C A ' S   I D E A L   H E A T



## Sizes

AMERICA'S IDEAL OIL BURNERS are made in five sizes and sold for cash or easy payments to suit all needs and requirements.

Number 1 for and up to 900 square feet of radiation,  
Number 2 for and up to 3,500 square feet of radiation,  
Number 3 for and up to 5,000 square feet of radiation,  
Number 4 for and up to 7,500 square feet of radiation,  
Number 5 for and up to 10,000 square feet of radiation,  
constructed for either 110 or 220 Volt, A.C. or D.C.  
lighting circuits.

Drapes and cushions—floors and walls  
are not covered with coal soot—Ameri-  
ca's Ideal Heat is *clean*.



## Economy

AMERICA'S IDEAL OIL BURNERS only works when the room-temperatures demand it. When the room drops two degrees the THERMOSTAT instantly starts the burner, and, using just sufficient fuel oil to raise the temperature the THERMOSTAT again stops the burner. This IDEAL Heat is economical, no irregularities, no waste, no overheating, with coal fired systems this IDEAL Heat is impossible.

## Installation and Service

AMERICA'S IDEAL OIL BURNERS are sold, installed and serviced by an organization of trained representatives. HANNAFORD & COMPANY is responsible for every installation under our guarantee which assures every purchaser complete and dependable service and satisfactory home heat, even temperature and without waste.

## Manufacturer's Warranty and Guarantee

MANUFACTURER'S WARRANTY: Hannaford & Company agrees that so long as the Purchaser shall use in America's Ideal Burner gas oil or other fuel oil approved by Hannaford & Company, Hannaford & Company will, within one year from the date of the original installation of America's Ideal Burner on the property of the Purchaser, replace at its expense all parts manufactured by it where such replacement is made necessary by original defect in material or workmanship, provided the defective parts are delivered to Hannaford & Company at its factory in Chicago with transportation prepaid. Hannaford & Company further agrees to maintain service on the burner and equipment covered by this order for the above period against any and all failures in performance arising from such defective material or workmanship. No other or different guarantee than contained in this order shall be binding upon Hannaford & Company.

GUARANTEE: Hannaford & Company guarantees America's Ideal Oil Burner and service for one year from date of installation against any defective material or workmanship, if the burner does not heat your building, and for just and reasonable cause you are not satisfied, the burner will be removed and your heating plant restored to its original condition and your money promptly and cheerfully refunded.





# Confidence



AMERICA'S IDEAL OIL BURNER is worthy of every confidence. Years of engineering experience are behind its simple patented features. Every installation has proven that the purchasers confidence has been completely justified in the burner and its performance. Its engineers are loyal in seeing that this honor is continually maintained—that AMERICA'S IDEAL OIL BURNERS will more than justify the confidence placed in them.



## AMERICA'S IDEAL OIL BURNER

*Manufactured By*

**HANNAFORD & COMPANY**  
CHICAGO, ILLINOIS

